

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND REGION
J.F.K. FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-0001

MEMORANDUM

DATE: June 24, 1998

SUBJ: Inspection Report Summary
Superior Plating Company
Southport, CT

FROM: Steven Calder, Air Technical Unit

SPC

TO: File

The facility was targeted for a chromium MACT inspection because the facility failed its performance test for chromium as required under 40 C.F.R Part 63, Subpart N. During the inspection of Superior Plating Company (Superior) the inspector documented the facility continues to operate in violation of the chromium emission limit.

The facility was observed installing a new chromium emission control system. The roof was structurally reinforced with steel beams and the three new wet scrubbers were in place on the roof. The company is spending over \$900,000 to meet the standard and provided documents to show it costs for installation.

At the end of the inspection a close-out meeting was held with John Durrazo, Environmental Manager, Production Manager, and John Raymond, President. The following issue were discussed with the facility.

1. The main reason for the inspection was due to the facility failing the emission limits for chromium as required by the Chromium MACT standard.
2. The sand blasting glove box by the Nickel Room had material on the floor and dust in the room. The material is disposed of as hazardous waste and the material should be cleaned-up and the cyclone maintained to capture the material.
3. Although the floors and drains are connected to a closed-loop system for treatment by the onsite waste water treatment system, the facility could be more careful with spills and maintain the floors in a cleaner state. The Mr. Raymond thought that washing down the floors more often than once an 8-hour shift would help.
4. Regarding hazardous waste handling the dumpster of waste water sludge (F006) should be covered.

METAL FINISHING INSPECTION CHECKLIST

March 24, 1998

Inspector Name: Steven Calder	Inspection Date: 6/15/98	Time: 10:30
Facility Name: Superior Plating Company		
Address: Lacey Place, Southport, CT 06490		
Contact/Title: Richard Durazzo	Telephone No.: (203) 255-1501	
Inspection Attendees: S. Calder + R. Durazzo		
Credentials Presented To: R. Durazzo		

GENERAL QUESTIONS:

1. What do you manufacture at this facility? Electroplating Job Shop
Coat Engineering Precision Equipment for Aerospace, Defense
& Other Companies. Coat equipment such as Tool & Die Makers,
Gun barrels, & excursion motors.
2. Plant operating hours? 24 hr/day; 6 day/wk; 51 wk/yr
1/2 day Saturday
3. Commercial, Residential or Industrial area? Commercial near Residential
& Downtown Area.
4. No. of employees? 71
5. Are you currently under a state order, consent agreement or consent decree for air concerns?
If yes, for what? What document number? When was the document issued? Are you complying
with the conditions of the document?
State CT DEP - NOV issued 4/98.
6. Any recent additions/modifications at the facility? What? If yes, were permits required and
obtained? Yes Installing 3 new Wet Scrubbers to
Control Cr Emission estimated to cost \$900,000
7. Any future additions/modifications planned? What? May require permits!!
Only above in #6

8. Do you have all permits/source registrations required? If no, why not? What equipment not permitted as required? When do you expect to get the proper permits? What are the potential emissions from each piece of equipment that still needs a permit?

Large Diesel Generator permit w/State - Synthetic Minor
retaining permit but sold equipment.
Natural Gas Boilers.

9. Name/Address for correspondence (President or CEO of company preferred)?

John Raymond, President

10. Actual plantwide emissions for 1997 (i.e., VOC, Nox, chrome, other HAPs)?

VOCs - 25 Gallons/year Lacquer Finish
NOX - 2 tons/year estimated by boiler burning natural gas
Chrome - 40 lbs/year - Form R. Ni & Cu Cyanides Baths
HAPs - Pb w/HEPA Process, A103

11. Anticipated plantwide emissions for 1998 (i.e., VOC, Nox, chrome, other HAPs)? If significantly different from 1997 explain increase or decrease?

Follow-up

12. Potential plantwide emissions of VOCs, NOX, chrome, other HAPs?

Follow-up

CHROME PLATING QUESTIONS:

1. Do you currently have hard and/or decorative chrome electroplating operations or chrome anodizing operations at this facility? If so, how many tanks (with designations) do you maintain for each type of operation listed above? 21 Tanks - Hard Chrome

Potential Cumulative Rectifier Capacity of 1.02 Billion $\frac{\text{Amp hr}}{\text{yr.}}$

2. When did each operation identified in Question 1 above start up operations (month/yr)? Existing or new source (existing source = constructed on or before 12/16/93).

See Notification Form between 1956-85

3. Are you using trivalent or hexavalent chrome in your plating/anodizing bath solutions?

Chromic Acid Hexavalent CR

4. Has chrome emission testing been done? When? Did EPA or State observe test? Was testing done according to the reference test method? Was compliance verified? Obtain a copy of the summary page of the final test report, which includes test results. Testing due as follows: exist hard/anodizing = by 7/25/97; exist decorative = 7/25/96; new between 12/16/93 and 1/25/95 = 7/25/95; new after 1/25/95 = test w/i 180 days of start up.

Chrome testing performed 8/97 Results received 11/97.

Air Tox - tested w/State Observing

FB#2 - 0.035 mg/dscm FB#3 - 0.028 mg/dscm

5. Was an initial notice on your chrome plating/anodizing operations submitted to EPA or the State? On what date submitted (required by 7/25/95 for existing operations and simultaneously with notice of construction if new operation on or before 1/25/95 and within 30 days of commencement of construction for new operation after 1/25/95)? Ask to see a copy.

7/21/95 Letter

6. Was a notification of compliance status submitted? When? (Due by: if no testing required - exist hard/anodizing = 2/24/97; exist decorative = 2/24/96; new 12/16/93 to 1/25/95 = 2/24/95; new after 1/25/95 = w/i 30 days of start up; if testing required - submit notice w/i 90 days of test completion). Ask to see a copy. **(Compliance dates are as follows: exist hard/anodizing = 1/25/97; exist decorative = 1/25/96; newly installed between 12/16/93 and 1/25/95 = 1/25/95; new after 1/25/95 = upon startup).**

Yes,

7. Do you have an Operation and Maintenance plan in place? When implemented? (Due by: exist hard/anodizing = 1/25/97; exist decorative = 1/25/96; new = implement upon start up).

Yes, Copies of Check list & Parametric Data received

8. Are you using a fume suppressant with a wetting agent to comply with the Chrome MACT Std. (applicable for decorative and anodizing operations only)? Also, a decorative plating operation using trivalent chromium and a wetting agent only needs to comply with certain recordkeeping (records of the bath components indicating clearly that a wetting agent is a component of the bath) and reporting requirements (see Section 63.347(i)).

No fume suppressant - causes pitting

9. If complying by use of a fume suppressant, are you monitoring and recording the plating bath surface tension and at the appropriate frequency? (Frequency is as follows: every 4 hours for the first 40 hours of tank operation; every 8 hours for the next 40 hours of tank operation; every 40 hours of tank operation thereafter until an exceedance occurs then resume more frequent monitoring as described above - Also, once a chrome bath solution is drained and replaced with a new bath the more frequent monitoring is required as described above). Ask to see the log book of surface tension measurements.

N/A

10. If complying by use of a fume suppressant, are you maintaining the plating bath surface tension below 45 dynes/cm? (Based on review of log). If company has exceeded the surface tension limit, note how often the occurrences happen, the value of each exceedance and the duration of each exceedance. Once you observed an exceedance did you implement your O&M plan right away? Did you revert back to more frequent monitoring?

N/A

11. What are you using to measure the plating bath surface tension? (i.e., stalagmometer or tensiometer)? Has the instrument been calibrated? How often and when is the instrument calibrated? Is this part of the O&M plan?

12. Ask the facility representative to make a plating bath surface tension measurement during the inspection, if possible and applicable. (Note the measurement).

13. If complying through means of an emission test, ask when testing was last done and for results of this and any other tests performed. (Outlet chromium concentration emission limit is as follows: new or existing anodizing and decorative = .01 mg/dscm; existing large hard chrome and all new hard chrome = .015 mg/dscm; existing small hard chrome = .03 mg/dscm) - **Note small hard chrome defined as being below 60 million amp-hr/yr maximum potential cumulative rectifier capacity.**

8/97 0.015 mg/dscm limit

14. What is the facility's maximum cumulative potential rectifier capacity (amp-hr/yr)? (for hard) (Calculated as: plantwide amperes at facility for hard chrome tank rectifiers x 8400 hrs x 0.7)

(limited by power company) Capacity 1.017 Billion amp-hr/yr.
+ 6620 kilowatt

15. For each chromeplating operation, how long are the plating times on average? (hr/min)

Most jobs 5 to 7 mil with Avg. of 1 mil per hour.
Flash work < 5 mil - 50 mil to 20 mil - max 70 mil (3 days 15,500 Amp)

16. For each chromeplating operation, what is the typical plating thickness? (microns)

See Above

17. When did you cease operation of any chromeplating or anodizing operations at this facility? Provide dates (month/yr).

N/A

18. What are you using to control chromium emissions?

2 - Fiber Bed Demisters 10' x 10' x 6 to 8 inches

19. Are you monitoring control and/or process equipment parameters? Which ones? What is used to measure or monitor each parameter? What are the inspection and monitoring frequencies? Are these found in your O&M plan? (Look at records/logs).

ΔP across filters 1 to 3 month cleaning cycle

20. Are the appropriate records being kept to ensure compliance? Maintained for 5 years? Records required are based in part on compliance method used. Records required are as follows:

Yes

Control Device #1 - Stack #3 75HP fan
Control Device #2 - Stack #2 2-25HP fans

- Inspection records for monitoring and control device equipment - when inspected, working condition of device during inspection, actions taken to correct deficiencies of devices.
- Maintenance records for all affected sources, control devices and monitoring equipment. *Filter media changes Recorded in O&M*
- Malfunction records for control devices, process equipment and monitoring equipment - occurrences, duration and cause. *Monthly inspect belts on Motors*
Non-routine log
- Action taken during malfunction if inconsistent with O&M plan.
- Any records (checklists, etc.) necessary to demonstrate consistency with O&M plan
- test reports documenting results of all performance tests. *Yes, Copies in-house & in back of O&M Plan*
- measurements necessary to determine conditions of performance tests, including measurements necessary for special compliance procedures.
- Monitoring records used to demonstrate compliance (date and time data collected) - For surface tension, pressure drops, temperatures, etc.
- Specific identification (date, time, commencement and completion) of each period of excess emissions as indicated by monitoring data, that occurs during periods of malfunction and at other times when no malfunctions occurring.
- Total process operating time (for each affected source) during each report period.
- Records of actual cumulative rectifier capacity of hard chrome plating for each month during a reporting period.
- For sources using fume suppressants to comply w/ Std, records of dates & times that fume suppressants are added to electroplating baths or anodizing baths.
- For trivalent decorative chrome electroplating, records of bath components purchased, w/ wetting agent clearly identified as a bath constituent.
- Records demonstrating whether source is meeting requirements for a waiver of recordkeeping or reporting requirements, if source granted a waiver.

21. Are you submitting the appropriate reports? (i.e., initial notice, notice of compliance status, notice of performance test, notice of perf. test results, ongoing compliance status for major sources, ongoing compliance status for area sources, reports on trivalent chrome baths).

22. Were you aware that the Chrome MACT Standard existed? How and When?

Yes

23. Do you belong to any metal finishing trade associations? Which? Did you ever attend workshops on this Chrome MACT Standard? When? Where? Who sponsored the workshops? Have you ever received any outreach material concerning the Chrome MACT Standard? Who submitted the material?

METAL CLEANING QUESTIONS (Basic SIP Requirements):

1. Number of Degreasers (cold and vapor)? *TWO*
2. Designations of each degreasing unit? *Nickel Degreaser 225 Gallons*
120°F
Chrome Precision 30 Gallons Room Temp
3. Type of units (small parts washers, open top vapor, continuous vapor)?
Water Based Degreaser (see MSDS sheet for CEE BEE A7X7)
4. Capacity of each unit (gallons)?
225 gal
30 gal
5. The solvent used in each unit? *CEE BEE A7X7*
6. Is each unit equipped with a cover? *NO*
7. Is each unit equipped with a refrigerated chiller or carbon adsorber for control? Which?
Heated 120°F & Room Temp.
8. If a carbon adsorber is used, how many carbon beds used? What is the control efficiency and how is it documented? How often are the beds replaced and desorbed?
N/A
9. Are covers in place over units when not in use?
10. Is the solvent recycled?
11. How is solvent waste disposed? By whom? Where does it go? Is waste stored in sealed containers while on site?
12. Which units are operating during the inspection? *Both*

N A

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4

N/A

13. Are parts dried internally until parts stop dripping or for 15 seconds?
14. Does each applicable unit have solid spray application?
15. Is there conspicuous posting of operating procedures in the vicinity of each unit?
16. Are the units equipped with the appropriate safety switches (i.e., condenser flow switch & thermostat-shuts off heat to solvent if condenser coolant not circulating; vapor level control thermostat - shut off heat if vapor level rises above primary cooling coils; spray safety switch - shuts off spray pump if vapor level drops more than 4 inches from bottom of primary condenser coil; and, low solvent safety switch - to shut off heating element if it becomes exposed).
17. What is the freeboard ratio (freeboard height/smallest interior dimension of unit)?
18. How often is solvent added to each unit? How much normally added ? What is the annual usage (either plantwide or for each individual unit)?
19. How much degreasing solvent used in calendar year 1997? (Gallons or pounds) Density of solvent?
20. How much degreasing solvent manifested out in calendar year 1997? (Gallons or pounds)
21. What were your plantwide degreasing solvent emissions to the atmosphere for calendar year 1997? (Pounds) (Fugitive and Stack emissions from Form Rs if applicable).
22. Any plans to reduce/eliminate use of VOC solvents thru replacement or process modifications? What? Anything done to date? What? When?

23. What are your anticipated degreasing solvent emissions for 1998? Explain increases or decreases anticipated.

HALOGENATED SOLVENT MACT STANDARD QUESTIONS:

1. Do you use carbon tetrachloride, chloroform, perchloroethylene, 1,1,1 trichloroethane, trichloroethylene or methylene chloride as a metal cleaning/degreasing solvent?

2. Did you submit an initial notification to EPA or State for each unit subject to this Standard? When submitted? Ask to see copy. (Initial notice due by following dates: exist = 8/29/95; newly constructed prior to 12/2/94 = 1/31/95; newly constructed after 12/2/94 = ASAP before construction or reconstruction). Exist = commenced construction on or before 11/29/93.

3. For each subject metal cleaning unit, when did construction commence (binding contract)? (Existing or new source)? When did you begin operations for each subject unit?

4. Capacity of each subject unit? (Exempt if capacity is 2 gallons or less)

5. Amount of above listed halogenated solvents used, manifested out and emitted to the atmosphere in calendar year 1997? Anticipated amounts for calendar year 1998? Explain any increases/decreases expected in 1998.

6. What method of compliance have you chosen (control combination, emission idling or alternative standards? If control combination or emission idling are used to comply, are you meeting the minimum equipment design and complying with the required work practices? Are

N/A

N/A

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you complying with the more specific requirements for control combination or emission idling? Are you complying with the alternative standard? Document compliance!! (Compliance required as of 12/2/97 for existing units and immediately upon start up for new units).

7. What is the solvent/air interface area of each open top degreasing unit? (Note if control combination is the method used to comply with standard, different options are available depending on whether this area is above or below 13 square feet).

8. Were you aware that the Halogenated MACT standards existed? How and when?

9. Do you belong to any metal finishing trade associations? Which? Did you ever attend workshops on the Halogenated Solvent MACT Standard? When? Where? Who sponsored the workshops? Have you ever received any outreach material concerning the Halogenated MACT Standard? When? Who sent the material?

10. Initial Statement of Compliance due by 5/1/98 for existing units and within 150 days of start up for new units. Have you been required to submit one of these notices yet? Have you submitted the notice? When? Ask to see copy.

BOILER QUESTIONS:

1. Number of boilers?

1- Johnson 125 HP R 66
1- Burnham 40 HP (Backup)

2. Designations of each boiler?

5000 MBTU/hr
1.7 MBTU/hr

3. Manufacturer of each boiler?

Johnson, Burnham

4. Do the boilers run on natural gas or fuel oil or both? If oil, what number fuel oil used?

5. Do boilers share a common stack or vent separately?

Yes 8' above Roof.

6. Which boilers operating during inspection?

125 HP & 40 HP

7. How many boilers normally operate in the summer and winter?

One the 125 HP

Winter periodically 40 H.P. w/
125 H.P.

8. Ask for 1997 annual fuel usage of each fuel burned in the boilers.

20 m m ft³

9. Do you have permits or registrations for each boiler? Which?

10. Any operating restrictions for boilers? If yes, what? Are the restrictions from a permit? Are you complying with the restrictions?

11. When was each boiler installed? (month/year)

12. What is the maximum heat input to each boiler? (mmbtu/hr)

13. Are any of the boilers subject to NSPS Subpart Dc for small heat generating units? Which ones? Are you complying with the notification, reporting, and testing requirements? (Note any boiler that commenced construction after 6/9/89 and is between 10 and 100 mmbtu/hr maximum design heat input capacity is subject to this Subpart).

N/A

14. What is the sulfur content limit you are restricted to using? (% sulfur by weight)

< 1.5%

15. What is the actual sulfur content of the fuel oil you are using? (% sulfur by weight) Get a copy of the most recent fuel supplier certification!

< 1.5%

16. Is each boiler equipped with opacity monitors? Are they working properly - check!

No

17. Do you have O₂ or CO₂ monitors for each boiler?

No

18. Do you see any opacity emanating from any of the boiler stacks? Or from other process equipment? If yes, do a Method 9 test if opacity appears to be over 20%? Results on opacity readings? Is source in compliance with the opacity limit? (20 % opacity is the normal limit

No

No

allowed).

19. What is the steam production from each boiler? (Lb/hr)
20. What is steam used for? (Building heat, process heat or both - if for process, what processes)
21. What % of maximum design capacity do you normally operate boilers at? (%)
22. Do you burn any waste oil? If so, how much a year? Any restrictions? What? From permit? Are you complying?

MISCELLANEOUS METAL PARTS & PRODUCTS COATING QUESTIONS:

1. What types of products are coated? *metal ferrous Alloys*
Aluminum
SS. - Nickel Alloy - Pb. Alloys
2. What substrates are coated? *(see Above)*
3. How many booths/dip tanks plantwide used for MMP&P coating? *21 chrome tanks*
stop-off
masking - 323
Toluene solvent
X-P2000
4. Designations of each booth/tank?
5. Applicability (varies from state to state). (MA - Have you ever emitted more than 1 ton of VOCs in any one month or more than 10 tons in any consecutive 12 month period - before control equipment?) (RI and CT - Have you ever emitted more than 15 pounds of VOC per day, plantwide, from all MMP&P coating operations?) Some states allow use of up to 55 gallons of noncompliant coatings per year.
≈ 50 gallon / year masking
6. How many coatings used plantwide for MMP&P coating? What are the designations of each? Ask for a spreadsheet, if available, of the coating designation and formulation data of each (i.e. VOC content as applied, % solids by volume, etc.).
2 - stop off 323
X-P 2000
MSDS sheets received

7. How many and which coatings run on each booth/tank? Are any or all interchangeable?

8. Type of coatings? (Clear, air dried, extreme performance, other)

9. Are the coatings considered lacquers, epoxies, enamels, urethanes, acrylics?

A lacquer thinner used to remove tape 25 Gallons/year

10. Which coating has the highest "as applied" VOC content? Designation?

VOC Content as applied = Lb VOC/gal ctg - water and exempt solvents

X-P 2000

Stop Off 323

60-80% VOC

80% VOCs

11. What is the percent reduction required for your worst case/highest VOC content coating?
Only applicable if control equipment is used. Is the percent reduction a permit requirement?

12. How are coatings dried? At what temperatures? If ovens used, are they run at temperatures exceeding 194 F? Are coatings classified as clear or extreme performance? Which ones?

Room Temperature Ambient Air
Fugitive Emission

13. If ovens are used, how many are there? Operating temperature of each? Number of drying zones? Which ovens are for which booths/tanks?

N/A

14. How many spray guns used in each booth (simultaneously)?

15. Type of spray guns used in each booth?

16. Number of vents per booth/tank?

17. What is the operating pressure at the nozzle for each spray gun?

N/A

18. What is the transfer efficiency of each booth?
19. What is the air flow thru each booth? (Ft/min)
20. Which booths and tanks are being used during the inspection? Which coatings are being applied in each booth/tank and what products being coated on each?
21. What year was each booth/tank installed? When did each begin operations?
22. What are the operating hours of each booth/tank? Number of shifts?
Hr/day; Day/wk; Wk/yr
23. What is the downtime of each booth/tank?
24. Is any control equipment used to control particulate and VOC emissions vented to the atmosphere? What? (Dry filters or water walls for PT and incinerators or carbon adsorbers for VOC).
25. If an incinerator or carbon adsorber is used, when was it installed? When did it start up?
26. Has the control equipment been stack tested? If yes, when? If not, why and is a test scheduled?
27. Who conducted the stack test?
28. Did EPA or State observe test?

29. What was the average destruction efficiency? (%)

30. What was the average capture efficiency? (%)

31. What was the average overall control efficiency? (%)

Was it enough to give minimum % reduction required for worst case coating?

32. Was compliance achieved?

33. Get a copy of the test report summary page verifying compliance!

34. Are all booths/tanks hooked to the control device? If no, which booths/tanks are and which are not? Are booths that are not hooked up to the control device complying with the emission limits (4.3 lb VOC/gal ctg for clear coatings; 3.5 lb VOC/per gal ctg for air dried and extreme performance coatings; and, 3.0 lb VOC/gal ctg for all other coatings).

35. Get incinerator or carbon adsorber operating parameters:

Incinerator:

N/A

- combustion temp
- stack temperature (outlet)
- shutdown alarm - high and low setpoints
- % O₂
- retention time

Carbon Adsorber:

N/A

- pressure drop across the beds
- VOC outlet concentration

36. Do you maintain coating usage logs? If yes, what frequency (daily, weekly, monthly)?

37. Can all booths/tanks operate simultaneously?

N/A



N/A

38. How many booths/tanks normally operate at one time?

39. Are solvents added to the coatings? If so, what solvent? Is this added solvent included in the calculation to determine % reduction required or to determine the "as applied" VOC content of coating?

40. Do you use cleaning solvents to clean spray guns, etc.? Do you include this amount when determining applicability to the MMP&P regulation? Are emissions from this cleaning solvent accounted for in your 1997 annual emissions report? Is cleaning solvent recycled? Density of cleaning solvent (lb/gal)?

41. What were your 1997 plantwide VOC emissions from MMP&P operations? (lbs/tons)

42. What do you anticipate your 1998 plantwide VOC emissions from MMP&P to be? (lbs/tons) Explain increases or decreases from 1997.

43. Have you looked into reformulation of your coatings? How many and which coatings have already been reformulated to compliant coatings? When?

44. How many gallons of coating used per day plantwide for MMP&P coating?

Average =

Maximum =

45. What percentage of parts coated are metal substrates?

46. Which booths/tanks are used solely to coat non-metal parts? What types of substrates coated in these booths/tanks (glass, plastic, wood, etc.)?

47. What are your annual VOC emissions from the coating of non-metal parts such as plastic, wood or glass? Does a RACT regulation apply (CTG or non-CTG)? What does RACT require? Are you complying?

N/A

BUFFING/GRINDING/SANDBLASTING QUESTIONS:

1. Have you any buffing, grinding or sandblasting operations at this facility? If yes, what and how many pieces of equipment do each type of work?

1 - Sand Blasting Rm Maintenance Shop
3 - AlO₃ Cabinets (1 glass beads)

2. Are these operations controlled? By what? How many control units? Which operations are controlled and which are not?

Small Cyclones for Cabinets
On by maintenance Nickel Rm material
on floor + dust in Room. material
disposed as hazardous waste from
potential ~~lead~~ Lead contamination.

3. Do you observe any opacity or fugitive emissions? From where? Explain. Do a method 9 if applicable.

No

4. What type of parts are buffed, grinded or sandblasted?

metal parts

→ Sand Blast Room to Bag house

EPA NEW ENGLAND MULTI-MEDIA CHECKLIST

General Information

Inspector: S. Calder Date: _____Facility Name: Superior Plating Contact: _____Address: _____
(STREET) (CITY) (STATE) (ZIP)

Phone No.: () - SIC Code: _____ No. Employees: _____

Products mfd. and description of facility: _____

Air: Stationary Source Compliance

1.0 Did you observe opaque smoke emitted from a smokestack (dark enough to obscure anything behind the plume)? No - If yes - Which process line (be specific, i.e., boiler No. 4)? _____ - Air pollution control equipment out of service? _____ - If yes - When will it be back on line? _____

2.OP Did you smell any strong odors? Yes If yes, from what process? By Nitric Acid Exhaust What chemicals (i.e., solvents) were causing the odors? _____ Is the process controlled by air pollution control equipment? _____

3.I Has the facility added any processes or expanded any pre-existing processes in the last two years which emit air pollutants? Yes - If yes, what type of process was added? In-House Draining Did the facility obtain a state air permit? _____

4.I a) Has the facility undergone any demolitions within the last 18 months? No

b) Has the facility removed any asbestos from any facility components (pipes, boilers, ducts, etc.) within the past 18 months. _____ - If yes - Approx. how many square feet or linear feet? [Units should be expressed in terms of feet for pipe (length) and square feet for all other facility components (area)]. _____

If either 4.a or 4.b were "yes" - answer the following:

c) Was notification for the project provided to EPA or any other regulatory agency? _____ Name and address of any contractors involved: _____

Air: Mobile Source Compliance

- 1.0 Does the facility dispense fuels (gasoline or diesel) on-site? NO Gasoline? _____ gallons. Diesel? _____ gallons. If observable, is the diesel clear or red in color? _____
- 2.I Does the facility repair vehicles on-site? Fork Lifts
Does the facility repair catalytic converters in-house? _____
Do they have a standard procedure? _____
If not, where do they send the vehicles for catalytic converter repair? _____
- 3.I Are auto air conditioners repaired or recharged on-site? _____
If so, does the facility have recovery and/or recycling equipment? _____
Are the technicians who perform repairs certified by an EPA-approved program? _____
If work is done off-site, what is the name and location of the facility? _____

EPCRA (Chem. Inventory)

- 1.I Has the facility experienced any accidental releases above the Reportable Quantity (RQ) within the last three years?
NO RQ
- 2.I If yes, provide the name of the chemical released, the quantity and the date.

- 3.I Does the facility have on-site at any time during the calendar year a) 10,000 lbs or more of any hazardous chemical requiring an MSDS or b) a threshold reporting quantity of a listed Extremely Hazardous Substances (EHS).
Yes Nitric Acid 1000gal tank
Chloric acid Flake
- 4.I If yes, have Tier II chemical inventory forms been filed annually with the fire department and local planning authorities? Yes LEPC - Fairfield
U. Ressler

EPCRA Section 313 (Toxic Release Inventory)

- 1.I Does the facility manufacture, process, or use any toxic chemicals in a quantity greater than 10,000 lbs per year?
Yes
- 2.I Has the facility submitted any toxic chemical release forms (Form R) to EPA? Yes, sent EPA Reg I by Dist in VA

FIFRA

- 1.I Does the facility manufacture, distribute, repackage, relabel, store or use pesticides? (Product which would be considered pesticides include disinfectants, sterilizers, germicides, algicides, virucides, swimming pool compounds, insecticides, fungicides, herbicides, etc.) NO
- 2.I If yes, does the label bear an EPA registration and establishment number? _____

RCRA

- 1.I Does the facility generate or otherwise handle hazardous waste? If so, describe the types of hazardous waste generated/handled, and state whether it is generated on-site or received from off-site.
Yes, LQG
- 2.OP Do you see any waste stored in containers, drums, tanks, pails, or dumpsters? Note the approximate quantity of waste, and its location. Yes
- 3.OP Are there any containers or tanks of hazardous waste that are open or in poor condition (leaking, corroded, etc.)? If so, describe waste (e.g., liquid, sludge, etc.), indicate markings on containers/tanks and the container/tank location(s). Open Roll off F000
- 4.OP Is there any evidence of spills or leaks or dumping to the ground, pits or lagoons? If so, note location and extent of release.
Spills from Plating lines to Sump to WWT
- 5.I Does the facility operate a boiler or industrial furnace? Has there been any incineration of hazardous waste on-site? If so, what type of hazardous waste, and is this an ongoing operation? NO

SPCC

- 1.I How many gallons of oil does the facility store above and below ground? 1 Drum waste oil - No Oil
 - If the facility stores more than 660 gallons in a single tank or more than 1320 gallons in a number of tanks above ground or more than 42,000 gallons below ground - Does the facility have a certified SPCC (Spill Prevention, Control, and Countermeasure) plan signed by a P.E.? _____
 Date of plan: _____. Certifying P.E. No. _____.

TSCA PCB

- 1.OI Is there any evidence of liquid-filled electrical equipment - that may contain PCBs? Yes: _____ No: X

If "yes", describe type of equipment:

Outside transformer removed

- 2.IP If the above equipment is considered to contain PCBs, what was the basis for this determination:

based on- marking with "Large PCB Mark"? Yes: _____ No: _____

based on- equipment Nameplate? Yes: _____ No: _____

based on- information from facility rep.? Yes: _____ No: _____

- 3.OP Is there any evidence of spills or leaks from transformers, capacitors, or other liquid-filled electrical equipment that may contain PCBs? Yes: _____ No: _____

If "yes", describe type of equipment and spill or leak:

- 4.OP Are there any PCB items (equipment, drums of waste or other containers) in storage for disposal? Yes: _____ No: _____

- 5.I Where are these items being stored and what is their condition? _____

TSCA Core

- 1.I Does the facility manufacture (synthesize anew) any chemical substances in any amount? NO If so, in simple terms, what chemical(s) do they make? _____
- 2.I Does the facility import any chemical substances into the United States? (Company is "Importer of Record") _____

UST

- 1.I Does the facility store in USTs motor fuels, waste oils, and/or hazardous substances? _____ YES _____ NO
(Note: USTs containing heating fuels for on-site heating purposes are exempted from RCRA UST.)

*Discharge WWT
water to
POTW*

If Yes, ask:

- 2.I Are the USTs registered with the state? _____ YES X NO
(Each state keeps notification data for USTs) *DEP H₂O Compliance*
- 3.I Is some form of leak detection in use for the UST system's tank and associated piping)? _____ YES _____ NO
- 4.I Are records available showing registration and monthly leak detection along with the yearly UST system tightness test? _____ YES _____ NO

Water

A. DIRECT (NPDES) & INDIRECT (PRETREATMENT) DISCHARGERS

1. I Has the facility expanded its production, wastewater flow or changed its processes since its last permit? NO
O Did you observe any outfalls? NO If so, was there any discoloration, steam, oil sheen, or odor? _____
2. P Does the facility use water in its manufacturing processes? YES If yes ---
I a Does the facility discharge wastewater (process, sanitary, cooling, etc.) into a surface water, municipal sewer system, or a subsurface system? NO
_____ Is the municipal sewer separate or combined? _____
I b Are all of the discharges covered by a permit? _____
3. P Does the facility have floor drains? YES to WWT If yes ---
a) Are materials stored in a manner that leaks or spills could enter the floor drains? _____
b) Are materials dumped down the floor drains? _____

I c) Where do the floor drains discharge (1. treatment facility, 2. municipal sewer, 3. subsurface system, 4. storm drain or 5. surface water)? WWTP from Sump?

4. Does the facility treat its process and/or sanitary wastewater prior to discharge? Yes If yes ---
 OP a) Is the treatment equipment operational, clean, and well maintained? _____
 OP b) Is the discharge free of solids, color and odor? _____

B. STORM WATER

- storm water Discharge Permit
1. O Are there catch basins, drains, culverts, ditches, etc. on the property intended to convey storm water. _____ If yes ---
 a) Is the storm water conveyed to a (1) treatment facility, (2) combined sewer, (3) separate storm sewer, (4) separate sanitary sewer, or (5) surface water? _____

2. I Are the storm water discharges covered by a permit or has the discharger applied for a permit? Yes
3. O Are materials stored outside? Some old equipment If yes ---
 a) Are materials (1) stored in sealed containers, under tarps or roofs, or (2) are they open to contact with precipitation? _____
 b) Are outside material handling/storage areas clean and kept in a manner to prevent contamination of runoff? _____.

UIC

- no
1. I Does this facility discharge any fluids to drains, plumbing, or drainage systems connected to UIC wells that are designed for the subsurface emplacement of fluids INTO the ground? (See UIC well types and fluid types below.)
 Yes: _____ No: _____
2. I If yes, indicate fluid type(s) and UIC well type(s) below.

3. I Does this facility have a federal, state, or local permit authorizing the underground injection system(s)?
 Yes: _____ No: _____
4. I If treated sewage effluent is discharged below ground, are other fluid types disposed of in the sewage waste stream?
 Yes: _____ No: _____
 If yes, indicate other fluid types disposed. _____

Wetlands

- 1.0 Within view, are there a) streams, ponds or other water bodies; b) vegetated areas with standing water; or c) areas with mucky, peaty or saturated (squishy) soils? If yes, have any of these areas been disturbed by waste/refuse disposal, storage of materials, ditching, or filling? If yes, briefly describe:

Along river & RR.

- 2.I If yes to both "Observable" questions, does facility have a federal CWA section 404 permit, or any state or local permit authorizing the activity (ies) observed?

Pollution Prevention (Optional)

- 1.I Does your facility have a pollution prevention, toxics use reduction, or RCRA waste minimization program?

Would you be interested in finding out more about pollution prevention techniques?

Take a look at this brochure, and feel free to call any of the EPA, state or other staff listed for more information.

CODES

O - OBSERVABLE P - PROCESS I - INTERVIEW

ADDITIONAL COMMENTS

CONCLUSION

RECOMMENDATION FOR FOLLOW-UP

Forwarded to	Contact	Phone	Mail Code
Air	Fred Weeks	565-4071	SEA
EPCRA 313/ TSCA Core	Kim Schweisberg	565-3250	SEA
EPCRA (CHEM)	Don Mackie	565-2159	SEA
FIFRA	Cindy Brown/Wayne Toland	565-3264	SEA
RCRA	Suzanne Parent	565-3321	SER
SPCC	Don Grant	565-3280	SEW
TSCA PCB	Abdi Mohamoud	565-9168	SEA
UST	Bill Torrey	573-9604	HBO
WATER	Joan Serra	565-9112	SEW
WETLANDS	Kyla Bennett	565-9081	SEE

This is a pre-decisional document protected by the deliberative process privilege. Conclusions or recommendations are intended solely as preliminary information for government personnel. This form contains tentative conclusions and staff-level recommendations and does not create any rights, substantive or procedural, or defenses, as they are not binding on the Agency.

ADDENDUM ON WHEN TO REFER

AIR

Question 1: Refer the checklist any time you observe opaque smoke from the facility's stack. Excess opacity may be a sign of operational problems or that the facility is not operating according to design specifications and/or air pollution permit requirements.

Question 2: Refer the checklist anytime you sense odors from a process. The facility may be having trouble with its air pollution capture and/or destruction equipment or may not be following good engineering work practices.

Question 3: Refer the checklist if a facility has not obtained a state air permit for a new process or piece of air pollution control equipment (EPA no longer writes air permits). Not all installations require a permit. Therefore, the air program will follow-up to determine if the new device required a permit.

Question 4: Refer the checklist if the facility answers yes to either 4.a or 4.b. Federal regulations require that EPA be notified of 1) stripping more than 160 square feet or 260 linear feet of asbestos materials from a facility; or 2) any demolition operations. Region I maintains a database which it uses to determine if a facility has complied.

EPCRA (Chem. Inventory)

- a) NO to questions 1 -- No referral (question 2 requires no answer)
- b) YES to question 1 -- refer (question 2 must be completed)
- c) NO to question 3 -- No referral (question 3 requires no answer)
- d) YES to question 3 -- refer (question 4 must be completed)

EPCRA Section 313 (Toxic Release Inventory)

If answer to 1. is yes, please refer.

FIFRA

If Question 2 is No; refer to Pesticide Section.

RCRA

- (O) Answers to questions 3 or 4 are YES.
- (P) Answer to questions 3 or 4 are YES.

- (I) Answer to question 1 is that hazardous waste are received from off-site. (Acceptance of hazardous waste from off-site may indicate that a facility is an illegal TSDF.)

Answer to question 5 indicates that hazardous waste is burned on-site. (If waste oils alone are burned on-site, do not refer the checklist to RCRA.)

SPCC

If the answer to Question 2 is No refer to SPCC Program.

TSCA PCB

If the answers to questions 2 or 3 are "yes," please refer to the TSCA PCB Program.

TSCA CORE

If the answer to 1 or 2 is yes refer to TSCA.

UST

If the answer to Question 1 is yes and the answer(s) to any of questions 2,3, or 4 is/are no, please notify the OUST or send the office a copy of the checklist.

WATER

If the answer to	A.1 is YES, refer to Water
	A.2.b. is NO, refer to Water
	A.3.c. is either 2, 3, or 4, refer to Water
	A.4 is NO, refer to Water
	B.1.a is either 3 or 4, refer to Water
	B.2 is NO, refer to Water
	B.3.a.2 is Yes, refer to Water
	B.3.b is NO, refer to Water

WETLANDS

If "yes" to both Observable questions and "no" to Interview question (or facility cannot produce **federal CWA section 404 permit**), refer checklist to EPA Wetlands Program contact.

ACRONYMS

AIR

AFS: AIRS Facility Subsystem (EPA's air compliance database)
AIRS: Aerometric Information Retrieval System
BACT: Best Available Control Technology
CAA: Clean Air Act
CAAA: Clean Air Act Amendments
CEM/CEMS: Continuous Emission Monitoring/System
CFC: Chlorofluorocarbon
EER: Excess Emission Report
HAP: Hazardous Air Pollutant
HON: Hazardous Organic NESHAP
LAER: Lowest Achievable Emission Rate
NAAQS: National Ambient Air Quality Standards
NARS: National Asbestos-Contractor Registry System
NESHAPS: National Emission Standards for Hazardous Air Pollutants
NSPS: New Source Performance Standards
NSR: New Source (Pre-construction) Review
PM: Particulate Matter
RACT: Reasonably Available Control Technology
SIP: State Implementation Plan
VE: Visible Emissions
VOC: Volatile Organic Compounds

EPCRA

EPCRA: Emergency Planning and Community Right-to-Know Act
LEPC: Local Emergency Planning Committee
SERC: State Emergency Response Commission
TRI: Toxic Release Inventory

FIFRA

FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act,
 as Amended
EPA Reg. No. - EPA Registration Number (one for each pesticide)
EPA Est. No. - EPA Establishment Number (where a pesticide is
 manufactured)

RCRA

RCRA - Resource Conservation & Recovery Act
HSWA - Hazardous and Solid Waste Amendments
TCLP - Toxicity Characteristic Leaching Procedure
LDR or Land Ban - The Land Disposal Restrictions
TSDF - Treatment, Storage and Disposal Facility
LQG - Large Quantity Generator
SQG - Small Quantity Generator
BIF - Boiler and Industrial Furnace

TSCA/PCBs

TSCA - Toxic Substances Control Act
 PCBs - Polychlorinated biphenyls
 ML - Large PCB Mark

UST

UST - Underground Storage Tanks
 OUST - Office of UST

UIC

	Fluid Type	UIC Well Type
* liquid wastes	* stormwater, washwater	* well
* process wastewater	and/or spill drainage	* leach field
* non process wastewater	from	
* non contact cooling	- maintenance areas	* leaching
water	- hazardous material	pit
		* leaching
* heat pump or air	or hazardous waste	trench
conditioning fluids	storage, staging or	* dry well
* untreated sewage	handling areas	* cesspool
effluent	- process or manu-	
* treated sewage	facturing areas	* _____
_____ effluent from a	- fuel storage areas	
other treatment plant or	- other areas suscep-	
septic system	tible to hazardous	
	substance release	

WETLAND

CWA - Clean Water Act
 404 - specific section of the CWA regulating the discharge of dredged or fill material into waters of the U.S., including wetlands.

METAL FINISHING INSPECTION CHECKLIST

March 24, 1998

Owner: John Raymond

Inspector Name: S Calder	Inspection Date:	Time:
Facility Name: Superior Plating		
Address: Lacey Place South Port CT		
Contact/Title: Richard Durazzo	Telephone No.: 203-255-1501	
Inspection Attendees:		
Credentials Presented To: Richard Durazzo		

GENERAL QUESTIONS:

1. What do you manufacture at this facility?

Aerospace, Tool & Dye Maker, Electroless & Large, excorsion-rotors, Gun Barrels Job Shop

2. Plant operating hours? 24 hr/day; 6 day/wk; 51 wk/yr

1/2 Saturday

3. Commercial, Residential or Industrial area?

4. No. of employees? 71

5. Are you currently under a state order, consent agreement or consent decree for air concerns? If yes, for what? What document number? When was the document issued? Are you complying with the conditions of the document? Check w/ State

N.O.V. - 4/98 Copy

6. Any recent additions/modifications at the facility? What? If yes, were permits required and obtained?

Yes. Plans-in-House \$900K +

= > \$1mm for MACT standard

7. Any future additions/modifications planned? What? May require permits!!

8. Do you have all permits/source registrations required? If no, why not? What equipment not permitted as required? When do you expect to get the proper permits? What are the potential emissions from each piece of equipment that still needs a permit?

Natural Gas -- No O.I.
Minor
Diesel Gen. Not used -- Sold Large Diesel Generator - *Never used*
w/ strip Synthetic Minor Natural Gas

9. Name/Address for correspondence (President or CEO of company preferred)?

John Raymond, Pres.

10. Actual plantwide emissions for 1997 (i.e., VOC, Nox, chrome, other HAPs)?

VOC - 1 gallon finish 25 Gallon/gal gear
NOX - 2 tons - 20mm H_2O natural gas
Chrome - 40 lbs chrome/gear
HAPs - Pb, w/HEPA process, Al_2O_3 (sand Plast w/ bag capture)

11. Anticipated plantwide emissions for 1998 (i.e., VOC, Nox, chrome, other HAPs)? If significantly different from 1997 explain increase or decrease?

3,500 CFM w/ Dry Pack
4 - Ni
1 - w/ Water
1 - Nitric Acid
Nickel Cyanide Cu. + w/ skid w/ ex. draw Dry C.

12. Potential plantwide emissions of VOCs, NOX, chrome, other HAPs?

25 Gallon 1 gallon thinner
Gas use \approx 2 tons.

CHROME PLATING QUESTIONS:

1. Do you currently have hard and/or decorative chrome electroplating operations or chrome anodizing operations at this facility? If so, how many tanks (with designations) do you maintain for each type of operation listed above? *21 Tanks - Hard Chrome*

2. When did each operation identified in Question 1 above start up operations (month/yr)? Existing or new source (existing source = constructed on or before 12/16/93).

see Notification Form 1986 \rightarrow 1985

3. Are you using trivalent or hexavalent chrome in your plating/anodizing bath solutions?

Hex - Hard Chrome

4. Has chrome emission testing been done? When? Did EPA or State observe test? Was testing done according to the reference test method? Was compliance verified? Obtain a copy of the summary page of the final test report, which includes test results. Testing due as follows: exist hard/anodizing = by 7/25/97; exist decorative = 7/25/96; new between 12/16/93 and 1/25/95 = 7/25/95; new after 1/25/95 = test w/i 180 days of start up.

Air Tox Deferred 5 years for Title V

Yes.

Air Tox - tested
see March 5, 1998 Letter

5. Was an initial notice on your chrome plating/anodizing operations submitted to EPA or the State? On what date submitted (required by 7/25/95 for existing operations and simultaneously with notice of construction if new operation on or before 1/25/95 and within 30 days of commencement of construction for new operation after 1/25/95)? Ask to see a copy.

7/21/95 Le Her

6. Was a notification of compliance status submitted? When? (Due by: if no testing required - exist hard/anodizing = 2/24/97; exist decorative = 2/24/96; new 12/16/93 to 1/25/95 = 2/24/95; new after 1/25/95 = w/i 30 days of start up; if testing required - submit notice w/i 90 days of test completion). Ask to see a copy. **(Compliance dates are as follows: exist hard/anodizing = 1/25/97; exist decorative = 1/25/96; newly installed between 12/16/93 and 1/25/95 = 1/25/95; new after 1/25/95 = upon startup).**

7. Do you have an Operation and Maintenance plan in place? When implemented? (Due by: exist hard/anodizing = 1/25/97; exist decorative = 1/25/96; new = implement upon start up).

7/7/97 - Feb 97 - 1/25/97

8. Are you using a fume suppressant with a wetting agent to comply with the Chrome MACT Std. (applicable for decorative and anodizing operations only)? Also, a decorative plating operation using trivalent chromium and a wetting agent only needs to comply with certain recordkeeping (records of the bath components indicating clearly that a wetting agent is a component of the bath) and reporting requirements (see Section 63.347(i)).

NO

9. If complying by use of a fume suppressant, are you monitoring and recording the plating bath surface tension and at the appropriate frequency? (Frequency is as follows: every 4 hours for the first 40 hours of tank operation; every 8 hours for the next 40 hours of tank operation; every 40 hours of tank operation thereafter until an exceedance occurs then resume more frequent monitoring as described above - Also, once a chrome bath solution is drained and replaced with a new bath the more frequent monitoring is required as described above). Ask to see the log book of surface tension measurements.

N/A

10. If complying by use of a fume suppressant, are you maintaining the plating bath surface tension below 45 dynes/cm? (Based on review of log). If company has exceeded the surface tension limit, note how often the occurrences happen, the value of each exceedance and the duration of each exceedance. Once you observed an exceedance did you implement your O&M plan right away? Did you revert back to more frequent monitoring?

11. What are you using to measure the plating bath surface tension? (i.e., stalagmometer or tensiometer)? Has the instrument been calibrated? How often and when is the instrument calibrated? Is this part of the O&M plan?

N/A

12. Ask the facility representative to make a plating bath surface tension measurement during the inspection, if possible and applicable. (Note the measurement).

N/A

13. If complying through means of an emission test, ask when testing was last done and for results of this and any other tests performed. (Outlet chromium concentration emission limit is as follows: new or existing anodizing and decorative = .01 mg/dscm; existing large hard chrome and all new hard chrome = .015 mg/dscm; existing small hard chrome = .03 mg/dscm) - **Note small hard chrome defined as being below 60 million amp-hr/yr maximum potential cumulative rectifier capacity.**

14. What is the facility's maximum cumulative potential rectifier capacity (amp-hr/yr)? (for hard) (Calculated as: plantwide amperes at facility for hard chrome tank rectifiers x 8400 hrs x 0.7)

620 kilowatt max allowed by PowerCo. 760 MM 1.017 Bill amp-hr/yr

15. For each chromeplating operation, how long are the plating times on average? (hr/min)

Flash work 5 min 25 Efficiency 8 5 to 7 min most jobs 6 min - 20 min (some 20 min) bulk mil/hour Infrequent max 3 days 15500 Amp see above

16. For each chromeplating operation, what is the typical plating thickness? (microns)

17. When did you cease operation of any chromeplating or anodizing operations at this facility? Provide dates (month/yr).

N/A

18. What are you using to control chromium emissions?

10' x 10' Dry Box + one 75 HP Z-AutoYard Atomizers 6-8 inch Ref. Filter bed

19. Are you monitoring control and/or process equipment parameters? Which ones? What is used to measure or monitor each parameter? What are the inspection and monitoring frequencies? Are these found in your O&M plan? (Look at records/logs).

$\Delta P = \text{filter media across}$ 1 to 3 months cleaning cycles

20. Are the appropriate records being kept to ensure compliance? Maintained for 5 years? Records required are based in part on compliance method used. Records required are as follows:

Control Device #1 & #2
 Stack #3 & #2
 75 HP 2-25 HP

- Inspection records for monitoring and control device equipment - when inspected, working condition of device during inspection, actions taken to correct deficiencies of devices.

Filter media Changed Recorded

- Maintenance records for all affected sources, control devices and monitoring equipment.

Monthly - Inspect Beltson Motors

- Malfunction records for control devices, process equipment and monitoring equipment - occurrences, duration and cause.

None Routine Log.

- Action taken during malfunction if inconsistent with O&M plan.

- Any records (checklists, etc.) necessary to demonstrate consistency with O&M plan

- test reports documenting results of all performance tests. - yes in-house

- measurements necessary to determine conditions of performance tests, including measurements necessary for special compliance procedures.

- Monitoring records used to demonstrate compliance (date and time data collected) - For surface tension, pressure drops, temperatures, etc.

- Specific identification (date, time, commencement and completion) of each period of excess emissions as indicated by monitoring data, that occurs during periods of malfunction and at other times when no malfunctions occurring.

- Total process operating time (for each affected source) during each report period.

- Records of actual cumulative rectifier capacity of hard chrome plating for each month during a reporting period.

- For sources using fume suppressants to comply w/ Std, records of dates & times that fume suppressants are added to electroplating baths or anodizing baths.

- For trivalent decorative chrome electroplating, records of bath components purchased, w/ wetting agent clearly identified as a bath constituent.

- Records demonstrating whether source is meeting requirements for a waiver of recordkeeping or reporting requirements, if source granted a waiver.

21. Are you submitting the appropriate reports? (i.e., initial notice, notice of compliance status, notice of performance test, notice of perf. test results, ongoing compliance status for major sources, ongoing compliance status for area sources, reports on trivalent chrome baths).

22. Were you aware that the Chrome MACT Standard existed? How and When?

Yes Initial Notice sent 7/21/95

23. Do you belong to any metal finishing trade associations? Which? Did you ever attend workshops on this Chrome MACT Standard? When? Where? Who sponsored the workshops? Have you ever received any outreach material concerning the Chrome MACT Standard? Who submitted the material?

Yes. CT Assoc. of Metal Finishers
~~AAEP~~ AES American
monthly meeting

METAL CLEANING QUESTIONS (Basic SIP Requirements):

1. Number of Degreasers (cold and vapor)? Cold - see m.s.D.S. Room temp.
2. Designations of each degreasing unit? CEE BEE A 7x7 Degreasers
1 Part Cee Bee
3 Part H₂O
3. Type of units (small parts washers, open top vapor, continuous vapor)? (2006) - 2256 gallon
(3069) - Chrome Precision
Room Temp
4. Capacity of each unit (gallons)?
5. The solvent used in each unit? Emulsified mixture
Proprietary
6. Is each unit equipped with a cover?
7. Is each unit equipped with a refrigerated chiller or carbon adsorber for control? Which?
8. If a carbon adsorber is used, how many carbon beds used? What is the control efficiency and how is it documented? How often are the beds replaced and desorbed?
9. Are covers in place over units when not in use?
10. Is the solvent recycled?
11. How is solvent waste disposed? By whom? Where does it go? Is waste stored in sealed containers while on site?
12. Which units are operating during the inspection?

13. Are parts dried internally until parts stop dripping or for 15 seconds?
14. Does each applicable unit have solid spray application?
15. Is there conspicuous posting of operating procedures in the vicinity of each unit?
16. Are the units equipped with the appropriate safety switches (i.e., condenser flow switch & thermostat-shuts off heat to solvent if condenser coolant not circulating; vapor level control thermostat - shut off heat if vapor level rises above primary cooling coils; spray safety switch - shuts off spray pump if vapor level drops more than 4 inches from bottom of primary condenser coil; and, low solvent safety switch - to shut off heating element if it becomes exposed).
17. What is the freeboard ratio (freeboard height/smallest interior dimension of unit)?
18. How often is solvent added to each unit? How much normally added ? What is the annual usage (either plantwide or for each individual unit)?
19. How much degreasing solvent used in calendar year 1997? (Gallons or pounds) Density of solvent?
20. How much degreasing solvent manifested out in calendar year 1997? (Gallons or pounds)
21. What were your plantwide degreasing solvent emissions to the atmosphere for calendar year 1997? (Pounds) (Fugitive and Stack emissions from Form Rs if applicable).
22. Any plans to reduce/eliminate use of VOC solvents thru replacement or process modifications? What? Anything done to date? What? When?

23. What are your anticipated degreasing solvent emissions for 1998? Explain increases or decreases anticipated.

HALOGENATED SOLVENT MACT STANDARD QUESTIONS:

1. Do you use carbon tetrachloride, chloroform, perchloroethylene, 1,1,1 trichloroethane, trichloroethylene or methylene chloride as a metal cleaning/degreasing solvent?

2. Did you submit an initial notification to EPA or State for each unit subject to this Standard? When submitted? Ask to see copy. (Initial notice due by following dates: exist = 8/29/95; newly constructed prior to 12/2/94 = 1/31/95; newly constructed after 12/2/94 = ASAP before construction or reconstruction). Exist = commenced construction on or before 11/29/93.

3. For each subject metal cleaning unit, when did construction commence (binding contract)? (Existing or new source)? When did you begin operations for each subject unit?

4. Capacity of each subject unit? (Exempt if capacity is 2 gallons or less)

5. Amount of above listed halogenated solvents used, manifested out and emitted to the atmosphere in calendar year 1997? Anticipated amounts for calendar year 1998? Explain any increases/decreases expected in 1998.

6. What method of compliance have you chosen (control combination, emission idling or alternative standards? If control combination or emission idling are used to comply, are you meeting the minimum equipment design and complying with the required work practices? Are

you complying with the more specific requirements for control combination or emission idling?
Are you complying with the alternative standard? Document compliance!! (Compliance required as of 12/2/97 for existing units and immediately upon start up for new units).

7. What is the solvent/air interface area of each open top degreasing unit? (Note if control combination is the method used to comply with standard, different options are available depending on whether this area is above or below 13 square feet).

8. Were you aware that the Halogenated MACT standards existed? How and when?

9. Do you belong to any metal finishing trade associations? Which? Did you ever attend workshops on the Halogenated Solvent MACT Standard? When? Where? Who sponsored the workshops? Have you ever received any outreach material concerning the Halogenated MACT Standard? When? Who sent the material?

10. Initial Statement of Compliance due by 5/1/98 for existing units and within 150 days of start up for new units. Have you been required to submit one of these notices yet? Have you submitted the notice? When? Ask to see copy.

BOILER QUESTIONS:

1. Number of boilers?

1 - Johnson 125 HP R 66
1 - Back Up 2070 40 HP Burnham N O

2. Designations of each boiler?

5000 MMBTU/HR
1.7 MMBTU/HR

3. Manufacturer of each boiler?

may 1998 State Inspected
Natural Gas

4. Do the boilers run on natural gas or fuel oil or both? If oil, what number fuel oil used?

N.G.

5. Do boilers share a common stack or vent separately?

Yes - 8ft above Roof

6. Which boilers operating during inspection?

125 HP

7. How many boilers normally operate in the summer and winter?

1

8. Ask for 1997 annual fuel usage of each fuel burned in the boilers.

3500 CCF
126,000 CCF
So. Co. 1997

9. Do you have permits or registrations for each boiler? Which?

20 MM #3
#

10. Any operating restrictions for boilers? If yes, what? Are the restrictions from a permit? Are you complying with the restrictions?

11. When was each boiler installed? (month/year)

12. What is the maximum heat input to each boiler? (mmbtu/hr)

13. Are any of the boilers subject to NSPS Subpart Dc for small heat generating units? Which ones? Are you complying with the notification, reporting, and testing requirements? (Note any boiler that commenced construction after 6/9/89 and is between 10 and 100 mmbtu/hr maximum design heat input capacity is subject to this Subpart).

14. What is the sulfur content limit you are restricted to using? (% sulfur by weight)

15. What is the actual sulfur content of the fuel oil you are using? (% sulfur by weight) Get a copy of the most recent fuel supplier certification!

16. Is each boiler equipped with opacity monitors? Are they working properly - check!

17. Do you have O2 or CO2 monitors for each boiler?

18. Do you see any opacity emanating from any of the boiler stacks? Or from other process equipment? If yes, do a Method 9 test if opacity appears to be over 20%? Results on opacity readings? Is source in compliance with the opacity limit? (20 % opacity is the normal limit

allowed).

19. What is the steam production from each boiler? (Lb/hr)
20. What is steam used for? (Building heat, process heat or both - if for process, what processes)
21. What % of maximum design capacity do you normally operate boilers at? (%)
22. Do you burn any waste oil? If so, how much a year? Any restrictions? What? From permit?
Are you complying?

MISCELLANEOUS METAL PARTS & PRODUCTS COATING QUESTIONS:

1. What types of products are coated?

metal Ferrous Alloys - Aerospace
Aluminum
SS, Nickeloyed - Pb-Alloys

2. What substrates are coated?

3. How many booths/dip tanks plantwide used for MMP&P coating?

4. Designations of each booth/tank?

No Spray booth

Masking - paint-red stop off-323
tavern solvent X-P 2000
painted on benches
brushed on

5. Applicability (varies from state to state). (MA - Have you ever emitted more than 1 ton of VOCs in any one month or more than 10 tons in any consecutive 12 month period - before control equipment?) (RI and CT - Have you ever emitted more than 15 pounds of VOC per day, plantwide, from all MMP&P coating operations?) Some states allow use of up to 55 gallons of noncompliant coatings per year.

5 Gallons/

≈ 50 Gallons/year

6. How many coatings used plantwide for MMP&P coating? What are the designations of each? Ask for a spreadsheet, if available, of the coating designation and formulation data of each (i.e. VOC content as applied, % solids by volume, etc.).

Asked for MSB.5 for stop off 323
X-P 2000

7. How many and which coatings run on each booth/tank? Are any or all interchangeable?

8. Type of coatings? (Clear, air dried, extreme performance, other)

9. Are the coatings considered lacquers, epoxies, enamels, urethanes, acrylics?

10. Which coating has the highest "as applied" VOC content? Designation?

VOC Content as applied =

Lb VOC/gal ctg - water and exempt solvents

*lacquer thinner to remove 79 lbs as solvent
≈ 256 gallon/year*

11. What is the percent reduction required for your worst case/highest VOC content coating? Only applicable if control equipment is used. Is the percent reduction a permit requirement?

12. How are coatings dried? At what temperatures? If ovens used, are they run at temperatures exceeding 194 F? Are coatings classified as clear or extreme performance? Which ones?

Room Temp. Ambient

13. If ovens are used, how many are there? Operating temperature of each? Number of drying zones? Which ovens are for which booths/tanks?

N/A

14. How many spray guns used in each booth (simultaneously)?

N/A

15. Type of spray guns used in each booth?

N/A

16. Number of vents per booth/tank?

N/A

17. What is the operating pressure at the nozzle for each spray gun?

18. What is the transfer efficiency of each booth?
19. What is the air flow thru each booth? (Ft/min)
20. Which booths and tanks are being used during the inspection? Which coatings are being applied in each booth/tank and what products being coated on each?
21. What year was each booth/tank installed? When did each begin operations?
22. What are the operating hours of each booth/tank? Number of shifts?
Hr/day; Day/wk; Wk/yr
23. What is the downtime of each booth/tank?
24. Is any control equipment used to control particulate and VOC emissions vented to the atmosphere? What? (Dry filters or water walls for PT and incinerators or carbon adsorbers for VOC).
25. If an incinerator or carbon adsorber is used, when was it installed? When did it start up?
26. Has the control equipment been stack tested? If yes, when? If not, why and is a test scheduled?
27. Who conducted the stack test?
28. Did EPA or State observe test?

29. What was the average destruction efficiency? (%)

30. What was the average capture efficiency? (%)

31. What was the average overall control efficiency? (%)

Was it enough to give minimum % reduction required for worst case coating?

32. Was compliance achieved?

33. Get a copy of the test report summary page verifying compliance!

34. Are all booths/tanks hooked to the control device? If no, which booths/tanks are and which are not? Are booths that are not hooked up to the control device complying with the emission limits (4.3 lb VOC/gal ctg for clear coatings; 3.5 lb VOC/per gal ctg for air dried and extreme performance coatings; and, 3.0 lb VOC/gal ctg for all other coatings).

35. Get incinerator or carbon adsorber operating parameters:

Incinerator:

N/A

- combustion temp
- stack temperature (outlet)
- shutdown alarm - high and low setpoints
- % O₂
- retention time

Carbon Adsorber:

N/A

plating solution
Aceto Carbon Run through

- pressure drop across the beds
- VOC outlet concentration

36. Do you maintain coating usage logs? If yes, what frequency (daily, weekly, monthly)?

37. Can all booths/tanks operate simultaneously?

39. Are solvents added to the coatings? If so, what solvent? Is this added solvent included in the calculation to determine % reduction required or to determine the “as applied” VOC content of coating?

41. What were your 1997 plantwide VOC emissions from MMP&P operations? (lbs/tons)

43. Have you looked into reformulation of your coatings? How many and which coatings have already been reformulated to compliant coatings? When?

45. What percentage of parts coated are metal substrates?

46. Which booths/tanks are used solely to coat non-metal parts? What types of substrates coated in these booths/tanks (glass, plastic, wood, etc.)?

47. What are your annual VOC emissions from the coating of non-metal parts such as plastic, wood or glass? Does a RACT regulation apply (CTG or non-CTG)? What does RACT require? Are you complying?

BUFFING/GRINDING/SANDBLASTING QUESTIONS:

1. Have you any buffing, grinding or sandblasting operations at this facility? If yes, what and how many pieces of equipment do each type of work?

1- Sand Blast - Room AlO_3
1- Glass Bead or AlO_3 Cabinet (Blow Box)

2. Are these operations controlled? By what? How many control units? Which operations are controlled and which are not?

Cabinets small Bag house ^{g. 5. d. r.} scheduled -
Sand Blast to Bag House
when user says bag is 109 m
Bags changer

3. Do you observe any opacity or fugitive emissions? From where? Explain. Do a method 9 if applicable.

4. What type of parts are buffed, grinded or sandblasted?